



RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/686,522

Source: O/PE

Date Processed by STIC: 10/19/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin30help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING

DATE: 06/20/2001

PATENT APPLICATION: US/09/686,522A

TIME: 14:27:43

Input Set : A:\BB-1165 US NA Corrected Spec.txt

Output Set: N:\CRF3\06202001\I686522A.raw

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Cahoon, Rebecca E.
 4 Hitz, William D.
 5 Thorpe, Catherine J.
 6 Tingey, Scott V.
 8 <120> TITLE OF INVENTION: PHYTIC ACID BIOSYNTHETIC ENZYMES
 10 <130> FILE REFERENCE: BB1165 US NA
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/686,522A
 C--> 13 <141> CURRENT FILING DATE: 2001-06-04
 15 <150> PRIOR APPLICATION NUMBER: 60/082,960
 16 <151> PRIOR FILING DATE: 1998-04-24
 18 <150> PRIOR APPLICATION NUMBER: PCT/US99/08790
 19 <151> PRIOR FILING DATE: 1999-04-22
 21 <160> NUMBER OF SEQ ID NOS: 24
 23 <170> SOFTWARE: Microsoft Office 97

ERRORED SEQUENCES

923 <210> SEQ ID NO: 24
 924 <211> LENGTH: 267
 925 <212> TYPE: PRT
 926 <213> ORGANISM: Synechocystis sp.
 928 <400> SEQUENCE: 24
 929 Met Leu Pro Glu Val Glu Gln Arg Leu Phe Ile Ala Gln Gln Leu Ala
 930 1 5 10 15
 932 Ala Val Ser Gly Glu Ile Leu Ile Gln Tyr Phe Arg Arg Ser His Leu
 933 20 25 30
 935 Gln Gly Gly Thr Lys Ile Asp Gln Val Ser Ala Ile Val Thr Gln Ala
 936 35 40 45
 938 Asp Glu Glu Ala Glu Gln Ala Met Val Asp Leu Ile Gln Ala Gln Phe
 939 50 55 60
 941 Pro Gln Asp Gly Val Ile Arg Glu Glu Gly Lys Asn Ile Ala Gly Lys
 942 65 70 75 80
 944 Ser Gly Tyr Thr Trp Val Leu Asp Pro Ile Asp Gly Thr Ser Ser Phe
 945 85 90 95
 947 Val Arg Gly Leu Pro Ile Phe Ala Thr Leu Ile Gly Leu Val Asp Ala
 948 100 105 110
 950 Asp Met Arg Pro Val Leu Gly Ile Ala His Gln Pro Ile Ser Gly Asp
 951 115 120 125
 953 Arg Trp Gln Gly Val Gln Gly Glu Gln Ser Asn Val Asn Gly Ile Pro
 954 130 135 140
 956 Leu Val Asn Pro Tyr Lys Ala Ser Glu Ile Asn Leu Thr Ala Ala Cys
 957 145 150 155 160
 959 Ile Val Ser Thr Thr Pro Leu Met Phe Thr Thr Pro Val Gln Gln Gln
 960 165 170 175
 962 Lys Met Ala Asp Ile Tyr Arg Gln Cys Gln Arg Thr Ala Phe Gly Gly
 963 180 185 190

RAW SEQUENCE LISTING

DATE: 06/20/2001

PATENT APPLICATION: US/09/686,522A

TIME: 14:27:43

Input Set : A:\BB-1165 US NA Corrected Spec.txt

Output Set: N:\CRF3\06202001\I686522A.raw

965 Asp Cys Phe Asn Tyr Leu Ser Ala Ala Ser Gly Trp Thr Ala Met Pro
966 195 200 205
968 Leu Val Ile Val Glu Ala Asp Leu Asn Phe Tyr Asp Phe Cys Ala Leu
969 210 215 220
971 Ile Pro Ile Leu Thr Gly Ala Asn Tyr Cys Phe Thr Asp Trp Gln Gly
972 225 230 235 240
974 Lys Glu Leu Thr Pro Glu Ser Thr Glu Val Val Ala Ser Pro Asn Pro
975 245 250 255
977 Lys Leu His Ser Glu Ile Leu Ala Phe Leu Gln
978 260 265

E--> 982 15

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/686,522A

DATE: 06/20/2001

TIME: 14:27:44

Input Set : A:\BB-1165 US NA Corrected Spec.txt

Output Set: N:\CRF3\06202001\I686522A.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:79 M:283 W: Missing Blank Line separator, <220> field identifier
L:87 M:283 W: Missing Blank Line separator, <220> field identifier
L:91 M:283 W: Missing Blank Line separator, <220> field identifier
L:95 M:283 W: Missing Blank Line separator, <400> field identifier
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:169 M:283 W: Missing Blank Line separator, <220> field identifier
L:173 M:283 W: Missing Blank Line separator, <400> field identifier
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:430 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:432 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:433 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:982 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:24

OIPE

RAW SEQUENCE LISTING DATE: 10/19/2000
 PATENT APPLICATION: US/09/686,522 TIME: 14:53:07

Input Set : A:\BB-1165 US NA Seq Listing.txt
 Output Set: N:\CRF3\10192000\I686522.raw

**Does Not Comply
 Corrected Diskette Needed**

see p.3

3 <110> APPLICANT: Cahoon, Rebecca E.
 4 Hitz, William D.
 5 Thorpe, Catherine J.
 6 Tingey, Scott V.
 8 <120> TITLE OF INVENTION: PHYTIC ACID BIOSYNTHETIC ENZYMES
 10 <130> FILE REFERENCE: BB1165 US NA
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/686,522
 C--> 13 <141> CURRENT FILING DATE: 2000-10-11
 15 <150> PRIOR APPLICATION NUMBER: 60/082,960
 W--> 16 <151> PRIOR FILING DATE: APRIL 24, 1998 1998-04-24
 18 <150> PRIOR APPLICATION NUMBER: PCT/US99/08790
 W--> 19 <151> PRIOR FILING DATE: APRIL 22, 1999 1999-04-22
 21 <160> NUMBER OF SEQ ID NOS: 24
 23 <170> SOFTWARE: Microsoft Office 97
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 462
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Oryza sativa
 30 <400> SEQUENCE: 1
 31 cttacatgta agctcgatt ttcttctcta cacaaccgaa aggtggagcg ttggcgagg 60
 32 accaaccaat ttctctctc taatcgccgc ggcgggggat agattgggag tgagcgcgta 120
 33 tggcgaggga gcagttctc gccgtcgcg tggacgccgc caagaacgcc ggcgagatca 180
 34 tccgcaagggt cttctaccag accaagaacg tggagcaca gggccagggt gatttgggtga 240
 35 cggagacgga caaggcctgc gaggacctca tcttcaacca cctccggaag cactaccg 300
 36 accacaagtt catcgccgag gagacgtcgg cggggctcgg cgccaccgcg gacctaccg 360
 37 acgaccgac ctggatcgtc gacccctcg atggcaccac caatttcgtc catggcttcc 420
 38 cttttgtttg cgtctcgatc ggtctcaccg tcgggaaat tc 462
 40 <210> SEQ ID NO: 2
 41 <211> LENGTH: 114
 42 <212> TYPE: PRT
 43 <213> ORGANISM: Oryza sativa
 45 <400> SEQUENCE: 2
 46 Met Ala Glu Glu Gln Phe Leu Ala Val Ala Val Asp Ala Ala Lys Asn
 47 1 5 10 15
 49 Ala Gly Glu Ile Ile Arg Lys Gly Phe Tyr Gln Thr Lys Asn Val Glu
 50 20 25 30
 52 His Lys Gly Gln Val Asp Leu Val Thr Glu Thr Asp Lys Ala Cys Glu
 53 35 40 45
 55 Asp Leu Ile Phe Asn His Leu Arg Lys His Tyr Pro Asp His Lys Phe
 56 50 55 60
 58 Ile Gly Glu Glu Thr Ser Ala Gly Leu Gly Ala Thr Ala Asp Leu Thr
 59 65 70 75 80
 61 Asp Asp Pro Thr Trp Ile Val Asp Pro Leu Asp Gly Thr Thr Asn Phe
 62 85 90 95
 64 Val His Gly Phe Pro Phe Val Cys Val Ser Ile Gly Leu Thr Val Gly
 65 100 105 110
 67 Lys Ile

*use this date format, per
 new sequence
 Rules*

RAW SEQUENCE LISTING DATE: 10/19/2000
 PATENT APPLICATION: US/09/686,522 TIME: 14:53:07

Input Set : A:\BB-1165 US NA Seq Listing.txt
 Output Set: N:\CRF3\10192000\I686522.raw

68 114
 70 <210> SEQ ID NO: 3
 71 <211> LENGTH: 561
 72 <212> TYPE: DNA
 73 <213> ORGANISM: Glycine max
 75 <220> FEATURE:
 76 <221> NAME/KEY: unsure
 77 <222> LOCATION: (529)..(530)
 79 <220> FEATURE:
 80 <221> NAME/KEY: unsure
 81 <222> LOCATION: (543)
 83 <220> FEATURE:
 84 <221> NAME/KEY: unsure
 85 <222> LOCATION: (546)
 87 <220> FEATURE:
 88 <221> NAME/KEY: unsure
 89 <222> LOCATION: (552)
 91 <220> FEATURE:
 92 <221> NAME/KEY: unsure
 93 <222> LOCATION: (556)
 95 <400> SEQUENCE: 3
 96 gaagaaagca gagcctctac tacatcatca cattcacatt tcagtacett ctctttctcc 60
 97 cagtctctca cacacaacaa ttgaagaaga aaatgggtga caatgattcg ctctcggaat 120
 98 tcctcgcatc tgcggtcgac gcggtcaga aagctggcga gattattcga aaaggcttct 180
 99 accagaccaa aaatgtggaa cacaaggac aggttgattt ggtcacagaa actgataaag 240
 100 catgtgaaga actcatatct aatcatctga aacagcttta tcccactcac aagttcattg 300
 101 gggaagagac cacagctgcc tatggcacta cagaacttac agatgaaccc acatggatat 360
 102 tgatccctgg atggaactac taacttgtgc atgggttccc tttgtttgtg tccattggc 420
 103 tcacaattgg aaaaatctac aattgggtgt gtatacaatc aatataatga cttttctgga 480
 104 tcatggaaaa gtgccttttg atgggaatcc ,ataaatgtct cacaacgann atcagcctct 540
 105 ctncantgag gngganaaaa c 561
 107 <210> SEQ ID NO: 4
 108 <211> LENGTH: 168
 109 <212> TYPE: PRT
 110 <213> ORGANISM: Glycine max
 112 <400> SEQUENCE: 4
 113 Met Val Asp Asn Asp Ser Leu Ser Glu Phe Leu Ala Ser Ala Val Asp
 114 1 5 10 15
 116 Ala Ala Gln Lys Ala Gly Glu Ile Ile Arg Lys Gly Phe Tyr Gln Thr
 117 20 25 30
 119 Lys Asn Val Glu His Lys Gly Gln Val Asp Leu Val Thr Glu Thr Asp
 120 35 40 45
 122 Lys Ala Cys Glu Glu Leu Ile Phe Asn His Leu Lys Gln Leu Tyr Pro
 123 50 55 60
 125 Thr His Lys Phe Ile Gly Glu Glu Thr Thr Ala Ala Tyr Gly Thr Thr
 126 65 70 75 80
 128 Glu Leu Thr Asp Glu Pro Thr Trp Ile Val Asp Pro Leu Asp Gly Thr
 129 85 90 95
 131 Thr Asn Phe Val His Gly Phe Pro Phe Val Cys Val Ser Ile Gly Leu

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/686,522 DATE: 10/19/2000
 TIME: 14:53:07

Input Set : A:\BB-1165 US NA Seq Listing.txt
 Output Set: N:\CRF3\10192000\I686522.raw

```

132      100      105      110
134 Thr Ile Gly Lys Thr Pro Thr Ile Gly Val Val Tyr Asn Pro Ile Ile
135      115      120      125
137 Asn Glu Leu Phe Thr Gly Ile His Gly Lys Gly Ala Phe Leu Asn Gly
138      130      135      140
140 Asn Pro Ile Lys Val Ser Ser Gln Thr Glu Leu Ile Ser Ser Leu Leu
141 145      150      155      160
143 Ala Thr Glu Ala Gly Thr Lys Arg
144      165
146 <210> SEQ ID NO: 5
147 <211> LENGTH: 667
148 <212> TYPE: DNA
149 <213> ORGANISM: Glycine max
151 <400> SEQUENCE: 5
152 gaattgcatg tggaaggctg gatgtattct ttgaacttgg ctttggtggt ccttgggatg 60
153 tagcaggtgg tgctgtcatt gttagagaag ctggaggtgt tgtatttgat ccgtccggtg 120
154 cagattttgc aataacatct cagcgagtag cagtttcaaa ccctttctaa aaggatgaac 180
155 ttgtggaaac tcggcgcaaa atggggtggg aaattttcaa ttaaccattg gcaagacctt 240
156 acaagatagc caacctttgt tagtccgtta acctttggcc caaagagttt tttagattcc 300
157 aagtttttac tagaagttcc aggttaaaaa ggttttagaa ttttaacttc ctccgggggc 360
158 tcaagagaat ccataataaa tcaactttaa tccctttaac caagggccaa gtccaacgaa 420
159 aaaaaactcc ctaaacatgg gaagaagcac ctccacaggg caccggttcc caaacctggt 480
160 cggaaaagcc gtgggcattc gggaaaaccg taccaatcaa ggatcctccc ggaacccaaa 540
161 ggcaaggcaa accgcggcac ggccttgggc caaaccccg tgaaccgccc cccaccaacg 600
162 gggagttcaa agcccaaggg gggaaaaggg gactttggcg gtccaaaact ttcacaaccg 660
163 ggggccc
165 <210> SEQ ID NO: 6
166 <211> LENGTH: 73
167 <212> TYPE: PRT
168 <213> ORGANISM: Glycine max
170 <400> SEQUENCE: 6
171 Ile Ala Cys Gly Arg Leu Asp Val Phe Phe Glu Leu Gly Phe Gly Gly
172 1 5 10 15
174 Pro Trp Asp Val Ala Gly Gly Ala Val Ile Val Arg Glu Ala Gly Gly
175 20 25 30
177 Val Val Phe Asp Pro Ser Gly Ala Asp Phe Ala Ile Thr Ser Gln Arg
178 35 40 45
W--> 180 Val Ala Val Ser Asn Pro Phe Xaa Lys Asp Glu Leu Val Glu Thr Arg
181 50 55 60
183 Arg Lys Met Gly Trp Glu Ile Tyr Asn
184 65 70
186 <210> SEQ ID NO: 7
187 <211> LENGTH: 1003
188 <212> TYPE: DNA
189 <213> ORGANISM: Triticum aestivum
191 <400> SEQUENCE: 7
192 acgagggaga ttcggaagcc atggcggagg agcagttcct ggccgcagct gtgggcccgc 60
193 ccaagagcgc cggcgagatt atccgcaaga gcttttacct aagcaagaaa gtggagcaca 120
194 agggccaggt ggatttgggt acggagacgg acaaggcatg cgaggatctc atcttcaacc 180

```

→ see item 10 on Enrol
 Summary Sheet

FSE

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/686,522
 DATE: 10/19/2000
 TIME: 14:53:07

Input Set : A:\BB-1165 US NA Seq Listing.txt
 Output Set: N:\CRF3\10192000\I686522.raw

```

195 acctccggat gctctaccgg gaccacaagt tcatcgcgca ggagacgtct gcagccctcg 240
196 gctccaaccga tgacctcacc tacgacccca cctggatagt cgacccctc gatggcacca 300
197 ccaacttcgt tcatggcttt ccttttgtgt gcgtctcgat tggcctcacc attgggaaga 360
198 tteccaccgt tggagttgtg tacaacccca tcatgaatga gcttttcaca gctgttcgtg 420
199 gaaaagggtgc ttttctcaat ggctctccaa ttaaaacatc gcctcaaaat gagttggtga 480
200 aggtctttat ggtgacagag gtatgggacca aaagagacaa gtccactttg gatgatacaa 540
201 ccaacagaat taataagtta ctattcaaga ttagatctat acgtatgtgt ggctctttgg 600
202 ctctaaacat gtgtggagtt gcttgtggtg ggctagattt gtgttatgag atcggttttg 660
203 gtggcccttg ggatgtggct gctggagctt tgattctaaa ggaagctggg ggttttgttt 720
204 ttgatccgag cggatgatgag ttgatctga tggcgcaaag aatggcagga tcaaatggcc 780
205 acctcaagga tcagttcatc aaagcattgg gagatgcaag ctgaataact tatttctctt 840
206 ttcaagtaga atgaaagaat gtaagatggc cccaccaata agtaattgag ggctactttt 900
207 tgtgtagttc tatatgcata ttttgcaaac gtggcggatg taatgacatt ggatatattg 960
208 ctcgttttat ttaccatgca aggtgtgatc aaaaaaaaaa aaa 1003
210 <210> SEQ ID NO: 8
211 <211> LENGTH: 267
212 <212> TYPE: PRT
213 <213> ORGANISM: Triticum aestivum
215 <400> SEQUENCE: 8
216 Met Ala Glu Glu Gln Phe Leu Ala Ala Val Gly Ala Ala Lys Ser
217 1 5 10 15
219 Ala Gly Glu Ile Ile Arg Lys Ser Phe Tyr Leu Ser Lys Lys Val Glu
220 20 25 30
222 His Lys Gly Gln Val Asp Leu Val Thr Glu Thr Asp Lys Ala Cys Glu
223 35 40 45
225 Asp Leu Ile Phe Asn His Leu Arg Met Leu Tyr Pro Asp His Lys Phe
226 50 55 60
228 Ile Gly Glu Glu Thr Ser Ala Ala Leu Gly Ser Thr Asp Asp Leu Thr
229 65 70 75 80
231 Tyr Asp Pro Thr Trp Ile Val Asp Pro Leu Asp Gly Thr Thr Asn Phe
232 85 90 95
234 Val His Gly Phe Pro Phe Val Cys Val Ser Ile Gly Leu Thr Ile Gly
235 100 105 110
237 Lys Ile Pro Thr Val Gly Val Val Tyr Asn Pro Ile Met Asn Glu Leu
238 115 120 125
240 Phe Thr Ala Val Arg Gly Lys Gly Ala Phe Leu Asn Gly Ser Pro Ile
241 130 135 140
243 Lys Thr Ser Pro Gln Asn Glu Leu Val Lys Ala Leu Met Val Thr Glu
244 145 150 155 160
246 Val Gly Thr Lys Arg Asp Lys Ser Thr Leu Asp Asp Thr Thr Asn Arg
247 165 170 175
249 Ile Asn Lys Leu Leu Phe Lys Ile Arg Ser Ile Arg Met Cys Gly Ser
250 180 185 190
252 Leu Ala Leu Asn Met Cys Gly Val Ala Cys Gly Arg Leu Asp Leu Cys
253 195 200 205
255 Tyr Glu Ile Gly Phe Gly Gly Pro Trp Asp Val Ala Ala Gly Ala Leu
256 210 215 220
258 Ile Leu Lys Glu Ala Gly Gly Phe Val Phe Asp Pro Ser Gly Asp Glu
259 225 230 235 240

```


RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/686,522

DATE: 10/19/2000
 TIME: 14:53:07

Input Set : A:\BB-1165 US NA Seq Listing.txt
 Output Set : N:\CRF3\10192000\I686522.raw

```

261 Phe Asp Leu Met Ala Gln Arg Met Ala Gly Ser Asn Gly His Leu Lys
262                245                250                255
264 Asp Gln Phe Ile Lys Ala Leu Gly Asp Ala Ser
265                260                265
267 <210> SEQ ID NO: 9
268 <211> LENGTH: 1090
269 <212> TYPE: DNA
270 <213> ORGANISM: Hordeum vulgare
272 <400> SEQUENCE: 9
273 gcacgaggat aaactgagtg agtcagtcac tcttgaagtc gtgacgaaga acttcagaga    60
274 ccacctcata cttggggagg aaggtggcct tattggagat tctttgtcag agtatctctg    120
275 gtgcattgat ccttttagatg gaacaacaaa ctttgcacat ggttacccca gcttttctgt    180
276 atccattggt gttctttatc gaggcaagcc tgctgctgcc actgtggtgg aattttgttg    240
277 tgggctatg tgctggagca ctctacaat tctgcatct tctggcaaag gtgcttattg    300
278 taatgggcaa aaaattcatg tcagtccaac agaaaagggtg gaacagtctc ttctggtaac    360
279 tgggttttga tatgaacatg atgatgcatg gctcaccaat ataaatttgt tcaaggaatt    420
280 tactgatgtt agcaggggag tacgaaggct aggctctgct gctgccgata tgtcccatgt    480
281 tggcttaggc attacagaag cctactggga atatcggtt aagccgtggg acatggctgc    540
282 tggcgttctg atagttaga aagctggtgg agtagtgaca cgcattggatg gtggggagtt    600
283 tacagtcttt gatcgttctg ttcttgtttc caatggcggtt gttcatgac agcttttga    660
284 gcggatccgg cctgctactg aagatcttaa gaagaaagga attgatttct ccttgtggtt    720
285 taagcctgac aagtacccta ccgacttctg aatcacgctg ctcttcagct acttgttctc    780
286 tgtctagcaa aaataaggat gtttttgctg aacaacatg tacttagact gacaatacat    840
287 ttcaagacct ttctactcaa ccggatcgaa aattaaagcc gaactttaca taaaggagta    900
288 gagctcgaat gagcttctca ctggattcct ttgtcttga tcgaatgtat caggaagaaa    960
289 tgtttgcaaa aggtgttgta tgcatggttc cagcctgttg tacttggaag aatataactg   1020
290 ccaattttgt caatcatgga taatagcaag atctctcaag aagacatata ctaaaaaaaa   1080
291 aaaaaaaaaa                                     1090
293 <210> SEQ ID NO: 10
294 <211> LENGTH: 249
295 <212> TYPE: PRT
296 <213> ORGANISM: Hordeum vulgare
298 <400> SEQUENCE: 10
299 His Glu Asp Lys Leu Ser Glu Ser Val Ile Leu Glu Val Val Thr Lys
300    1                5                10                15
302 Asn Phe Arg Asp His Leu Ile Leu Gly Glu Gly Gly Leu Ile Gly
303    20                25                30
305 Asp Ser Leu Ser Glu Tyr Leu Trp Cys Ile Asp Pro Leu Asp Gly Thr
306    35                40                45
308 Thr Asn Phe Ala His Gly Tyr Pro Ser Phe Ser Val Ser Ile Gly Val
309    50                55                60
311 Leu Tyr Arg Gly Lys Pro Ala Ala Ala Thr Val Val Glu Phe Cys Gly
312    65                70                75                80
314 Gly Pro Met Cys Trp Ser Thr Arg Thr Ile Ser Ala Ser Ser Gly Lys
315    85                90                95
317 Gly Ala Tyr Cys Asn Gly Gln Lys Ile His Val Ser Pro Thr Glu Lys
318    100               105               110
320 Val Glu Gln Ser Leu Leu Val Thr Gly Phe Gly Tyr Glu His Asp Asp
321    115               120               125

```

VERIFICATION SUMMARY DATE: 10/19/2000
PATENT APPLICATION: US/09/686,522 TIME: 14:53:08

Input Set : A:\BB-1165 US NA Seq Listing.txt
Output Set: N:\CRF3\10192000\I686522.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:16 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:19 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:104 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:104 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3
L:105 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
M:340 Repeated in SeqNo=3
L:180 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:180 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:180 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:180 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
L:180 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:6
L:427 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:427 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:13
L:429 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
M:340 Repeated in SeqNo=13
L:430 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/686,522

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 _____ Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 _____ Wrapped Aminos The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 _____ Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 _____ Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 _____ Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 _____ Variable Length Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 _____ PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 _____ Skipped Sequences (OLD RULES) Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 _____ Skipped Sequences (NEW RULES) Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 10 _____ Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 _____ Use of <213>Organism (NEW RULES) Sequence(s) _____ are missing this mandatory field or its response.
- 12 _____ Use of <220>Feature (NEW RULES) Sequence(s) _____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 _____ PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.